R¹ and R², including the double bond connecting them, together form a phenyl or pyridyl ring or a ring of the formula

in which

R⁸ denotes hydrogen or straight-chain or branched alkyl having up to 4 carbon atoms,

R³ and R⁴, including the double bond connecting them, together form a phenyl ring or a 4- to 8-membered cycloalkene or oxocycloalkene radical,

all ring systems mentioned under R^{1}/R^{2} and R^{3}/R^{4} optionally being substituted up to 3 times, identically or differently, by halogen, trifluoromethyl, carboxyl, hydroxyl, by straight-chain or branched alkoxy or alkoxycarbonyl each having up to 6 carbon atoms or by straight-chain or branched alkyl having up to 6 carbon atoms, which for its part can be substituted by hydroxyl or by straight-chain or branched alkoxy having up to 4 carbon atoms,

D represents hydrogen, cycloalkyl having 4 to 12 carbon atoms or straight-chain or

branched alkyl having up to 12 carbon atoms,

- E represents the -CO- or -CS- group,
- L represents an oxygen or sulphur atom or a group of the formula -NR⁹,

in which

R⁹ denotes hydrogen or straight-chain or branched alkyl having up to 6 carbon atoms, which is optionally substituted by hydroxyl or phenyl,

 $\binom{R^5}{}$

denotes phenyl or a 5- to 7-membered saturated or unsaturated heterocycle having up to 3 heteroatoms from the group consisting of S, N and/or O,

the cyclic systems optionally being substituted up to 3 times, identically or differently, by nitro, carboxyl, halogen, cyano or by straight-chain or branched alkenyl or alkoxycarbonyl each having up to 6 carbon atoms or by straight-chain or branched alkyl having up to 6 carbon atoms, which is optionally substituted by hydroxyl, carboxyl or by straight-chain or branched alkoxy or alkoxycarbonyl each having up to 6 carbon atoms,

and/or the cyclic systems optionally being substituted by a group of the formula $-OR_{00} - NR_{11}R_{12}$.

in which

R¹⁰ denotes hydrogen or straight-chain or branched alkyl or alkenyl each having up to 6 carbon atoms,



R¹¹ and R¹² are identical or different and denote phenyl, hydrogen or straight-chain or branched alkyl having up to 6 carbon atoms or straight-chain or branched acyl having up to 8 carbon atoms, which is optionally substituted by a group of the formula -NR¹³R¹⁴,

in which

 R^{13} and R^{14} are identical or different and denote hydrogen or straightchain or branched acyl having up to 8 carbon atoms,

represents hydrogen, carboxyl or straight-chain or branched alkoxycarbonyl having up to 5 carbon atoms, or represents straight-chain or branched alkyl having up to 6 carbon atoms, which is optionally substituted by hydroxyl or by a group of the formula -O-CO-R¹⁵,

in which

R¹⁵ denotes phenyl which is optionally substituted up to 3 times, identically or differently, by halogen, hydroxyl or by straight-chain or branched alkyl having up to 5 carbon atoms, or denotes straight-chain or branched alkyl or alkenyl each having up to 22 carbon atoms, each of which is optionally substituted by a group of the formula -OR¹⁶,

in which

R¹⁶ denotes hydrogen, benzyl, triphenylmethyl or straight-chain or

branched acyl having up to 6 carbon atoms,

R⁷ represents hydrogen or

 R^6 and R^7 together represent the group of the formula =0,

or of the general formula (A2)

$$\begin{array}{c|c}
A & Z & R^3 \\
D & E & R^1 & R^2
\end{array}$$
(A2)

in which

A represents a radical of the formula

$$\begin{bmatrix} & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ &$$

L and M are identical or different and

denote hydrogen, halogen, trifluoromethyl, carboxyl, cycloalkyl having 3 to 6 carbon atoms, hydroxyl, phenyl or straight-chain or branched alkyl, alkoxycarbonyl or alkoxy each having up to 6 carbon atoms,

- Q denotes a nitrogen atom or the -CH- group,
- T denotes a group of the formula -SO₂ or -CO or an oxygen or sulphur atom,
- V denotes an oxygen or sulphur atom,

R^5 , R^6 , R^7 and R^8 are identical or different and

denote hydrogen, or straight-chain or branched alkyl having up to 6 carbon atoms, benzyl or phenyl, each of which is optionally substituted by halogen or by straight-chain or branched alkyl having up to 6 carbon atoms,

R⁹ denotes trifluoromethyl, benzyl or a 5- to 7-membered, optionally benzofused heterocycle having up to 3 heteroatoms from the group consisting of
S, N and/or O, which is optionally substituted up to 3 times, identically or
differently, by halogen, phenyl, hydroxyl or by straight-chain or branched
alkyl or alkoxy each having up to 4 carbon atoms, or
denotes a group of the formula -S(O)_a-R¹⁰,

- a denotes a number 0, 1 or 2,
- R¹⁰ denotes straight-chain or branched alkyl or alkenyl each having up to 8 carbon atoms, each of which is optionally substituted by straight-chain or branched acyl having up to 6 carbon atoms or by aryl or aroyl each having up to 10 carbon atoms, which for their part can be substituted up to 2 times, identically or differently, by halogen, trifluoromethyl or by straight-chain or branched acyl having up to 5 carbon atoms, or denotes aryl having 6 to 10 carbon atoms, which is optionally substituted by halogen, hydroxyl, trifluoromethyl or straight-chain or branched alkyl or alkoxy each having up to 5 carbon atoms,

D and E are identical or different and represent hydrogen, halogen, trifluoromethyl, hydroxyl, carboxyl or straight-chain or branched alkyl, alkoxy or alkoxycarbonyl each having up to 6 carbon atoms,

- Z represents an oxygen or sulphur atom,
- R¹ represents cycloalkyl having 3 to 10 carbon atoms or straight-chain or branched alkyl having 1 to 10 carbon atoms, or represents phenyl which is optionally substituted up to 2 times, identically or differently, by halogen, nitro, cyano, hydroxyl, straight-chain or branched alkyl or alkoxy each having up to 4 carbon atoms,

- R² represents hydrogen or straight-chain or branched alkyl having up to 3 carbon atoms,
- represents hydrogen or straight-chain or branched alkyl having up to 5 carbon atoms, or represents cycloalkyl having 3 to 7 carbon atoms, or represents phenyl or a 5- to 7-membered aromatic heterocycle having up to 3 heteroatoms from the group consisting of S, N and/or O, each of which is optionally substituted up to 3 times, identically or differently, by halogen, nitro, phenyl, hydroxyl or by straight-chain or branched alkyl or alkoxy having up to 6 carbon atoms,
- R^4 represents hydrogen or a group of the formula -CH₂-OH or CH₂O-CO- R^{11} , in which
 - R¹¹ denotes hydrogen, straight-chain or branched alkyl having up to 8 carbon atoms or phenyl which is optionally substituted up to 3 times, identically or differently, by halogen, hydroxyl, cyano or straight-chain or branched alkyl or alkoxy each having up to 4 carbon atoms,

or of the general formula (A3)

$$D-H_{2}C = \begin{array}{c} O & R^{3} \\ \hline & NR^{2}-C - R^{4} \end{array}$$
 (A3)

in which

D represents a radical of the formula

$$\mathbb{R}^{7}$$
 \mathbb{R}^{6} \mathbb{R}^{10} \mathbb{R}^{8} \mathbb{R}^{10} \mathbb{R}^{8} \mathbb{R}^{10} \mathbb{R}^{10

in which

T denotes a nitrogen atom or the -CH- group,

R⁶, R⁷, R¹⁰ and R¹¹ are identical or different and denote hydrogen, trifluoromethyl, halogen or straight-chain or branched alkyl or alkoxy each having up to 6 carbon atoms,

R⁵, R⁸ and R⁹ are identical or different and denote hydrogen, cycloalkyl having 3 to 6 carbon atoms, phenyl, straight-chain or branched alkoxycarbonyl having up to 6 carbon atoms or straight-chain or branched alkyl having up to 6 carbon atoms, which is optionally substituted by halogen,

or, if T represents a nitrogen atom, R⁵ can also denote benzyl,

E and L are identical or different and

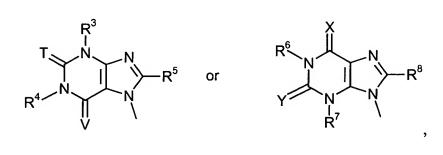
represent hydrogen, halogen, trifluoromethyl, hydroxyl, carboxyl or straight-chain or branched alkyl, alkoxy or alkoxycarbonyl each having up to 6 carbon atoms,

- R¹ represents cycloalkyl having 3 to 10 carbon atoms or straight-chain or branched alkyl having 1 to 10 carbon atoms, or represents phenyl which is optionally substituted up to 2 times, identically or differently, by halogen, cyano, hydroxyl, straight-chain or branched alkyl or alkoxy each having up to 4 carbon atoms,
- R² represents hydrogen or straight-chain or branched alkyl having up to 3 carbon atoms,
- R³ represents hydrogen or straight-chain or branched alkyl having up to 5 carbon atoms, or represents cycloalkyl having 3 to 7 carbon atoms, or represents phenyl or a 5- to 7-membered aromatic heterocycle having up to 3 heteroatoms from the group consisting of S, N and/or O, each of which is optionally substituted up to 3 times, identically or differently, by halogen, nitro, phenyl, hydroxyl or by straight-chain or branched alkyl or alkoxy having up to 6 carbon atoms,
- R⁴ represents hydrogen or a group of the formula -CH₂-OH or CH₂O-CO-R¹², in which
 - R¹² denotes hydrogen, straight-chain or branched alkyl having up to 8 carbon atoms or phenyl which is optionally substituted up to 3 times, identically or differently, by halogen, hydroxyl, cyano or straight-chain or branched alkyl or alkoxy each having up to 4 carbon atoms,

or of the general formula (A4)

$$A-CH_2 \xrightarrow{D} \xrightarrow{E} R^1 \qquad (A4)$$

A represents a radical of the formula



in which

$R^3,\,R^4,\,R^6$ and R^7 are identical or different and

denote hydrogen, cycloalkyl having 3 to 7 carbon atoms or aryl having 6 to 10 carbon atoms,

or denote straight-chain or branched alkyl or alkenyl each having up to 8 carbon atoms, each of which is optionally substituted by halogen, hydroxyl or aryl having 6 to 10 carbon atoms,

T, V, X and Y are identical or different and denote an oxygen or sulphur atom,

R^5 and R^8 are identical or different and

denote hydrogen, halogen, cycloalkyl having 3 to 8 carbon atoms or

straight-chain or branched alkyl or alkenyl each having up to 8 carbon atoms, each of which is optionally substituted by cycloalkyl having 3 to 8 carbon atoms, or by a 5- to 6-membered, aromatic, optionally benzofused heterocycle having up to 3 heteroatoms from the group consisting of S, N and/or O, or by aryl having 6 to 10 carbon atoms, where the cyclic systems for their part can be substituted up to 3 times, identically or differently, by a 5- to 6-membered aromatic heterocycle having up to 3 heteroatoms from the group consisting of S, N and/or O, or by phenyl, benzyl, halogen, hydroxyl, carboxyl or by straight-chain or branched alkyl, alkoxy or alkoxycarbonyl each having up to 6 carbon atoms, or denote aryl having 6 to 10 carbon atoms or a 5- to 7-membered aromatic, optionally benzo-fused heterocycle having up to 3 heteroatoms from the group consisting of S, N and/or O, each of which is optionally substituted up to 3 times, identically or differently, by halogen, phenyl, trifluoromethyl, hydroxyl, carboxyl or by straight-chain or branched alkyl, alkoxy or alkoxycarbonyl each having up to 6 carbon atoms or by a group of the formula -(CO)_a-NR⁹R¹⁰,

in which

a denotes a number 0 or 1,

R⁹ and R¹⁰ are identical or different and denote hydrogen, phenyl or straight-chain or branched alkyl or acyl each having up to 5 carbon atoms,

D and E are identical or different and represent hydrogen, halogen, trifluoromethyl, hydroxyl, carboxyl or straight-chain

or branched alkyl, alkoxy or alkoxycarbonyl each having up to 6 carbon atoms,

represents hydrogen or cycloalkyl having 3 to 8 carbon atoms, or represents straight-chain or branched alkyl or alkenyl each having up to 8 carbon atoms, each of which is optionally substituted by cycloalkyl having 3 to 6 carbon atoms, phenyl or by a 5- to 6-membered aromatic heterocycle having up to 3 heteroatoms from the group consisting of S, N and/or O, or represents phenyl or a 5- to 6-membered aromatic heterocycle having up to 3 heteroatoms from the group consisting of S, N and/or O, the ring systems optionally being substituted up to 3 times, identically or differently, by halogen, phenyl, trifluoromethyl or straight-chain or branched alkyl or alkoxy each having up to 5 carbon atoms, hydroxyl or by a group of the formula -NR¹¹R¹²,

in which

 R^{11} and R^{12} have the meaning of R^9 and R^{10} indicated above and are identical to or different from this,

L represents an oxygen or sulphur atom,

R² represents mercapto, hydroxyl, straight-chain or branched alkoxy having up to 8 carbon atoms or the group of the formula

in which

- R¹³ denotes hydrogen or straight-chain or branched alkyl having up to 4 carbon atoms,
- R¹⁴ denotes hydrogen, phenyl or a 5- to 6-membered aromatic heterocycle having up to 3 heteroatoms from the group consisting of S, N and/or O,
- R¹⁵ denotes hydrogen or straight-chain or branched alkyl having up to 8 carbon atoms, which is optionally substituted by hydroxyl,

or of the general formula (A5)

$$\begin{array}{c|c} A & & G \\ \hline D & & & \\ \hline E & & & \\ \hline N & & & \\ \hline N & & & \\ \hline M & & & \\ \hline CO - N & & \\ \hline R^3 & & \\ \hline OH & & \\ \hline (A5) & & \\ \hline \end{array}$$

in which

A, D, E, G, L and M are identical or different and

represent hydrogen, halogen, trifluoromethyl, carboxyl, hydroxyl, straight-chain or branched alkoxy or alkoxycarbonyl each having up to 6 carbon atoms or straight-chain or branched alkyl having up to 6 carbon atoms, which for its part can be substituted by hydroxyl or by straight-chain or branched alkoxy having up to 4 carbon atoms,

R¹ and R² are identical or different and

represent hydrogen, cycloalkyl having 3 to 8 carbon atoms or straight-chain or branched alkyl having up to 10 carbon atoms, which is optionally substituted by cycloalkyl having 3 to 6 carbon atoms or represent phenyl which is optionally substituted by halogen or trifluoromethyl, or

R¹ and R², together with the carbon atom, form a 4- to 8-membered cycloalkyl ring

and

 R^3

represents phenyl which is optionally substituted up to 3 times, identically or differently, by nitro, carboxyl, halogen, cyano or by straight-chain or branched alkenyl or alkoxycarbonyl each having up to 6 carbon atoms or by straight-chain or branched alkyl having up to 6 carbon atoms, which is optionally substituted by hydroxyl, carboxyl or by straight-chain or branched alkoxy or alkoxycarbonyl each having up to 6 carbon atoms, and/or is optionally substituted by a group of the formula -OR⁴ or -NR⁵R⁶,

in which

R⁴ denotes hydrogen or straight-chain or branched alkyl or alkenyl each having up to 6 carbon atoms,

R⁵ and R⁶ are identical or different and denote phenyl, hydrogen or straight-chain or branched alkyl having up to 6 carbon atoms, or denote straight-chain or branched acyl having up to 8 carbon atoms, which is optionally substituted by a group of the formula -NR⁷R⁸.

 ${\sf R}^7$ and ${\sf R}^8$ are identical or different and denote hydrogen or straight-chain or branched acyl having up to 8 carbon atoms,

or of the general formula (A6)

A, D, E, G, L and M are identical or different and

represent hydrogen, halogen, trifluoromethyl, carboxyl, hydroxyl, straight-chain or branched alkoxy or alkoxycarbonyl each having up to 6 carbon atoms or straight-chain or branched alkyl having up to 6 carbon atoms, which for its part can be substituted by hydroxyl or by straight-chain or branched alkoxy having up to 4 carbon atoms,

R¹ and R² are identical or different and

represent hydrogen, cycloalkyl having 3 to 8 carbon atoms or straight-chain or branched alkyl having up to 10 carbon atoms, which is optionally substituted by cycloalkyl having 3 to 6 carbon atoms, or

represent phenyl which is optionally substituted by halogen or trifluoromethyl, or

 R^1 and R^2 , together with the carbon atom, form a 4- to 8-membered cycloalkyl ring and

R³ represents phenyl which is optionally substituted up to 3 times, identically or differently, by nitro, carboxyl, halogen, cyano or by straight-chain or branched alkenyl or alkoxycarbonyl each having up to 6 carbon atoms or by straight-chain or branched alkyl having up to 6 carbon atoms, which is optionally substituted by hydroxyl, carboxyl or by straight-chain or branched alkoxy or alkoxycarbonyl each having up to 6 carbon atoms, and/or is optionally substituted by a group of the formula -OR⁴ or -NR⁵R⁶,

and/of is optionally substituted by a group of the formula -OK · of -INK-K-,

in which

R⁴ denotes hydrogen or straight-chain or branched alkyl or alkenyl each having up to 6 carbon atoms,

R⁵ and R⁶ are identical or different and denote phenyl, hydrogen or straight-chain or branched alkyl having up to 6 carbon atoms, or denote straight-chain or branched acyl having up to 8 carbon atoms, which is optionally substituted by a group of the formula -NR⁷R⁸,

in which

 ${\sf R}^7$ and ${\sf R}^8$ are identical or different and denote hydrogen or straight-chain or branched acyl having up to 8 carbon atoms,

if appropriate in an isomeric form and their salts

and component B being at least one HMG-CoA reductase inhibitor.

- 2. (Amended) The method according to Claim 1 wherein said cardiovascular diseases are associated with metabolic diseases or deficits.
- 3. (Amended) The method according to Claim 2 for the control of arteriosclerosis, diseases of the coronary vessels of the heart, raised serum lipids, hypercholesterolaemia, hypertriglyceridaemia and mixed forms which are combined with raised VLDL or LDL and/or raised chylomicrons, and of syndrome X.
 - (Amended) The method according to Claim 2 for the treatment of secondary hypercholesterolaemia and secondary hypertriglyceridaemia, which are optionally associated with apolipoprotein E polymorphism, obesity, chylomicronaemia and chylomicronaemia syndrome, renal insufficiency, chronic renal insufficiency, nephrotic syndrome, diabetes mellitus type II, and with hepatomas and plasmacytomas.
- 5. (Amended) The method according to Claim 2, characterized in that component A is a compound of the general formula (A1).
- 6. (Amended) The method according to Claim 2, characterized in that component A is a compound of Examples 1-119.
- 7. (Amended) The method according to Claim 2, characterized in that component A is a compound of Examples 92-119.

- 8. (Amended) The method according to Claim 2, characterized in that component A is a compound of Examples 48 or 80.
- 9. (Amended) A pharmaceutical composition comprising a combination of an MTP inhibitor as component A and an HMG-CoA reductase inhibitor as component B according to Claim 1 and, if appropriate, one or more further suitable components.
- 10. (Amended) A pharmaceutical composition according to Claim 9, characterized in that it contains, as component A, the active compound 2-cyclopentyl-2-[4-(2,4-dimethyl-pyrido[2,3-b]indol-9-ylmethyl)-phenyl]-N-(2-hydroxy-1-phenyl-ethyl)-acetamide or 2-cyclopentyl-2-[4-(2,4-dimethyl-pyrimido[1,2-a]indol-10-ylmethyl)-phenyl]-N-(2-hydroxy-1-phenyl-ethyl)-acetamide and, as component B, the active compound atorvastatin, cerivastatin, simvastatin, pravastatin, lovastatin, fluvastatin, itavastatin or ZD 4522.
- 11. (Amended) A pharmaceutical composition according to Claim 9, characterized in that it contains, as component A, the compound (2S)-2-cyclopentyl-2-[4-(2,4-dimethyl-pyrido[2,3-b]indol-9-ylmethyl)-phenyl]-N-(2-(1R)-hydroxy-1-phenyl-ethyl)-acetamide.
- 12. (Amended) A process for the production of a pharmaceutical composition according to Claim 9, characterized in that the components A and B are converted into a suitable administration form with excipients and vehicles and, if appropriate, with further components.

Remarks / Explanations

As a result of this preliminary amendment, claims 1-12 are pending in the application. No new matter has been added.